

## STN Karlsruhe

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ACCESSION NUMBER: 2001-515952 [57] WPIDS

DOC. NO. CPI: C2001-154375

TITLE: Production of polymer dispersions, e.g. useful in cement-based floor tile adhesives, by emulsion or suspension polymerization of vinyl esters, (meth)acrylate esters and optionally ethylene.

DERWENT CLASS: A14 A93 F06 F09 L02

INVENTOR(S): WEITZEL, H

PATENT ASSIGNEE(S): (WACK) WACKER POLYMER SYSTEMS GMBH &amp; CO KG

COUNTRY COUNT: 27

## PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
EP 1110978	A1	20010627	(200157)*	GE	14	C08F218-04<--	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT							
RO SE SI TR							
DE 19962566	A1	20010705	(200157)			C08F218-04	
US 6576698	B1	20030610	(200340)			C08L009-04	

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1110978	A1	EP 2000-125251	20001124
DE 19962566	A1	DE 1999-1062566	19991223
US 6576698	B1	US 2000-721841	20001124

PRIORITY APPLN. INFO: DE 1999-19962566 19991223

## INT. PATENT CLASSIF.:

MAIN: C08F218-04; C08L009-04  
 SECONDARY: C04B024-26; C08F002-44; C08F220-10; C08F220-12;  
 C08L031-02; C09D131-04; C09J131-04

## BASIC ABSTRACT:

EP 1110978 A UPAB: 20011005

NOVELTY - Production of a polymer in the form of an aqueous dispersion or a water-dispersible powder by emulsion or suspension polymerization of monomers selected from vinyl esters, (meth)acrylate esters and optionally ethylene in the presence of a radical initiator and polyvinyl alcohol (PVA), optionally followed by drying the resulting aqueous dispersion, comprises starting the polymerization with 50-100% of the vinyl ester, 0-40% of the (meth)acrylate and at least 80% of the ethylene, and performing the polymerization at at least 60 deg. C.

USE - The dispersion or powder (claimed) is useful: (a) as a component of building adhesives (especially for internal and external floor tiles), plasters, fillers, screeds, sealants, mortars and paints based on hydraulic binders, e.g. cement, gypsum and water-glass; (b) as a binder in coating compositions and adhesives; and (c) as a coating or binder for textiles and paper.

ADVANTAGE - Cement-based tile adhesives have good stability and adhesion.

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## TECHNOLOGY FOCUS:

EP 1110978 A1 UPTX: 20011005

TECHNOLOGY FOCUS - POLYMERS - The initiator is used in an amount of 0.3-0.7 wt.% based on the total weight of monomers. The polymerization temperature is 65-90degreesC. Polymerization is started with 100% of the

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vinyl ester, and 100% of the (meth)acrylate ester is added subsequently. The PVA is 80-94% hydrolyzed, has a Hoeppler viscosity of 3-15 mPas (4% aqueous solution, 20degreesC), is optionally hydrophobically modified and is used in an amount of at least 5 wt.%. Polymerization is effected in the presence of 0.01-5 wt.% chain regulators. The powder is produced by spray drying.

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB  
MANUAL CODES: CPI: A04-F06E6; A04-F07; A12-R03; F03-E01; F05-A06B;  
L02-D09

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